ARCHIVES FOR METEOROLOGY, GEOPHYSICS, AND BIOCLIMATOLOGY

Series A

Meteorology and Atmospheric Physics

Vol. 34, 1985/86

ISSN 0066-6416

Edited by
E. R. Reiter, Fort Collins, Colo.

Springer-Verlag Wien New York

The exclusive copyright for all languages and countries, including the right for photomechanical and any other reproductions including microform is transferred to the publisher

© 1986 by Springer-Verlag/Wien

ARCHIVES
FOR METEOROLOGY,
GEOPHYSICS, AND
BIOCLIMATOLOGY

Founded by W. Mörikofer, Davos, and F. Steinhauser, Wien

Contents: Series A, Vol. 34, 1985/86

No. 1

Ferdinand Steinhauser — 80 Jahre 1

Kessler, R. C., D. Eppel, R. A. Pielke, and J. McQueen: A Numerical Study of the Effects of a Large Sandbar upon Sea Breeze Development 3

Speranza, A., and A. Trevisan: Planetary Scale Flow over Steep Mountains . . . 27

Kamra, A. K.: Modification of Some Microphysical Properties in the Highly Electrified Regions of Thundercloud 37

Suckling, Ph. W.: The U.S. Cold Wave of December 1983: An Assessment Utilizing the Historical Record Since 1940 51

Steinacker, R.: On the Interpretation and Motion of Synoptic Systems. 59

Teixeira, L., and E. R. Reiter: Sea Surface Temperature, Rainfall and Southern Oscillation: Relationships over Tropical America 85

Sheaffer, J. D., and E. R. Reiter: Influence of Pacific Sea Surface Temperatures on Seasonal Precipitation over the Western Plateau of the United States 111

No. 2

Kyle, T. G., and W. E. Clements: Nighttime Temperature Field in a Valley . . . 131

Idso, S. B.: An Upper Limit to Global Surface Air Temperature 141

Prezerakos, N. G.: Synoptic Scale Atmospheric Wave Break Down at 500 h Pa Over Europe During Cold Seasons 145

Ragette, G.: A New Method of Determining Vertical Velocities from Serial Radiosonde Data 159

Gygax, H. A.: Evidence for Mechanical Induced Downslope Wind in the Lee of Gently Sloped Hills. 167

Mukammal, E. I., H. H. Neumann, and T. R. Nichols: Some Features of the Ozone Climatology of Ontario, Canada and Possible Contributions of Stratospheric Ozone to Surface Concentrations 179

Sand, J. G.: A Theoretical Study of Airflow over an Obstacle in a Neutral or Slightly Unstable Atmosphere 213

Yamada, T.: Numerical Simulations of the Night 2 Data of the 1980 ASCOT Experiments in the California Geysers Area 223

Erratum 249

No. 3—4

Shen, R., E. R. Reiter, and J. F. Bresch: A Simplified Hydrodynamic Mesoscale Model Suitable for the Use over High Plateau Regions 251

Lafleur, P., and P. Adams: The Effect of Subarctic Woodland Vegetation on the Radiation Balance of a Melting Snow Cover 297

Nicholson, S. E., and D. Entekhabi: The Quasi-Periodic Behavior of Rainfall Variability in Africa and Its Relationship to the Southern Oscillation 311

Frey, K.: Gleichzeitigkeit von Nord- und Südföhn bei einer Westlage 349

Buchmann, J., P. L. da Silva Dias, and A. D. Moura: Transient Convection over the Amazon/Bolivia Region and the Dynamics of Droughts over Northeast Brazil . . 367

Krishnamurti, T. N., Shao-Hang Chu, and W. Iglesias: On the Sea Level Pressure of the Southern Oscillation 385

Robinson, D. A., E. Matthews, and G. Kukla: Human-Induced Changes in Winter Surface Albedo 427

Book Reviews 435

Erratum 437

List of Authors

Adams, P. 297

Bresch, J. F. 251
Buchmann, J. 367

Chu, S.-H. 385
Clements, W. E. 131

da Silva Dias, P. L. 367

Entekhabi, D. 311
Eppel, D. 3

Frey, K. 349

Gygax, H. A. 167

Idso, S. B. 141
Iglesias, W. 385

Kamra, A. K. 37
Kessler, R. C. 3
Krishnamurti, T. N. 385
Kukla, G. 427
Kyle, T. G. 131

Lafleur, P. 297

McQueen, J. 3
Matthews, E. 427
Moura, A. D. 367
Mukammal, E. I. 179

Neumann, H. H. 179
Nichols, T. R. 179
Nicholson, S. E. 311

Pielke, R. A. 3
Prezerakos, N. G. 145

Ragette, G. 159
Reiter, E. R. 85, 111, 251
Robinson, D. A. 427

Sand, J. G. 213
Sheaffer, J. D. 111
Shen, R. 251
Speranza, A. 27
Steinacker, R. 59
Suckling, Ph. W. 51

Teixeira, L. 85
Trevisan, A. 27

Yamada, T. 223